

DELL EQUALLOGIC™ PS5000X



Dell EqualLogic PS5000X is a virtualized iSCSI SAN that combines intelligence and automation with fault tolerance to provide simplified administration, rapid deployment, enterprise performance and reliability, and seamless scalability. With 10,000 RPM SAS disk drives, the PS5000X array provides outstanding performance with up to 6.4 TB of storage capacity.

EXCEPTIONAL EASE OF USE

The PS5000X is an intelligent storage array that is designed to provide rapid installation, simple management, and seamless expansion. All PS Series storage arrays include SAN configuration features and capabilities that sense network topology, automatically build RAID sets, and conduct system health checks to help ensure that all components are fully functional. A PS5000X is designed to be installed, configured, and serving storage in less than one hour.

MODULAR DESIGN WITH ENTERPRISE RELIABILITY

EqualLogic PS Series arrays are based on a virtualized modular storage architecture that enables IT managers to purchase only the storage they need, when they need it — preventing both underutilization and over-provisioning. Using innovative data movement technology, all EqualLogic PS Series arrays in a SAN work together to automatically manage data, load balance across all resources, and expand to meet growing storage needs.

The EqualLogic PS5000X Series is designed to meet and exceed the rugged requirements of the data center. The PS5000X includes fault tolerance capabilities through fully redundant and hot-swappable components — dual-controllers, standard dual fan trays, dual power supplies, and disk drives with hot spares.

ENTERPRISE DATA SERVICES WITHOUT ADDITIONAL COST

The PS5000X has built-in storage features once relegated to top-tier data centers, enabling best practice storage for every size organization. EqualLogic PS Series arrays include the following enterprise data services and software features with no additional software licensing fees:

MANAGEMENT | PS Group Manager • Rapid Provisioning • Remote Setup Wizard • Roles-Based Administration • Volume Management

DATA PROTECTION, AVAILABILITY AND RECOVERY | Auto-Replication, Multi-Way • Instant Volume Restore • Multi-Path I/O¹ • Multi-Volume, Writeable Snapshots • Snapshot and Auto-Replication Scheduler • Volume Cloning • Volume Consistency Sets

STORAGE VIRTUALIZATION | Array Evacuation • Automatic Load Balancing • Automatic or Manual Storage Tiering • Complete SAN Virtualization • Online Data and Volume Movement • RAID Load Balancing • Storage Pools • Thin Provisioning

MAINTENANCE | Auto-Stat Disk Monitoring System • E-mail Home • Enclosure Monitoring System • Performance Monitoring

SERVER MANAGEMENT AND PROTECTION INTEGRATION | Auto-Snapshot Manager/Microsoft Edition² • Auto-Snapshot Manager/VMware Edition³ • Automatic MPIO Connection Management • Microsoft VSS and VDS Providers • Smart Copy for Microsoft® Exchange®, SQL Server®, Windows® File Systems and VMware® VMFS • VMware® Site Recovery Manager Adapter

FLEXIBILITY WITH LOW COST OF OWNERSHIP

The Dell EqualLogic PS Series arrays represent a breakthrough in storage economics, from purchase and setup to operation and upgrades. Unlike traditional SANs, the EqualLogic PS Series comes complete with the available software and applications expected from an enterprise-level SAN. The PS Series scales on-demand — and online — allowing storage growth without disrupting applications. As a result, EqualLogic PS5000X arrays provide exceptional flexibility at a low total cost of ownership.

Whether consolidating a direct-attached storage (DAS) infrastructure, migrating data from an existing SAN or NAS system, streamlining data protection processes, or simply adding storage capacity, the EqualLogic PS Series from Dell offers a family of proven, high-performance, self-managing storage arrays designed to meet the requirements of today's critical datacenter environments.

¹Qualified for Microsoft Windows Server 2000 and 2003, VMware®, Linux® and Sun™ Solaris™ Operating Systems

²Qualified for Microsoft Windows Server® 2003 and Windows Server® 2008

³Qualified for VMware® ESX 3.5, ESXi 3.5 and ESX 3



FEATURES		DELL EQUALLOGIC™ PS5000X
Product Configurations		
Storage Controllers		Dual controllers with a total of 2 GB battery-backed memory Battery-backed memory provides up to 72 hours of data protection
Hard Disk Drives		Sixteen (16) SAS hot-pluggable hard disk drives
Drive Capacity		10,000 RPM SAS drives available in 400 GB
System Capacity		6.4 TB using sixteen (16) 400 GB SAS disk drives
Technical Highlights		
Volumes		Up to 1,024
Snapshots		512 per volume / up to 10,000 total
Hosts Accessing PS Series Group		Up to 512 per pool / 2,048 per group
Host Protocol		Any standards-compliant iSCSI initiator
Operating Systems Supported		Windows® 2000 Server, Windows Server® 2003, Windows Server® 2008, including Hyper-V®, Windows Vista®, Windows XP®, Red Hat® Enterprise Linux®, SUSE® Linux Enterprise, Linux, Sun™ Solaris, UNIX®, IBM® AIX®, HP-UX, Mac OS® X, VMware® ESX Server 3 / 3.5 / ESXi 3.5, Citrix XenServer, Virtual Iron®, Novell® Netware®
RAID Support		Automatic RAID 5, RAID 10, and RAID 50
GbE Network Interfaces		Three (3) copper per controller
TCP Network Support		IPv4, IPv6 core support including JITC
Expansion Option		Can be combined with other EqualLogic PS Series online
Reliability		Redundant, hot-swappable controllers, power supplies / cooling fans, and disks Individual disk drive slot power control
Enclosure Monitoring System		Automatic spare configuration and utilization SMART Automatic bad block replacement Auto-Stat Disk Monitoring System (ADMS) to monitor health of data on disk drives
Management Interfaces		SNMP, telnet, SSH, HTTP, Web (SSL), host scripting Serial console Multi-administrator support Ability to configure a separate management network
Security		CHAP authentication Access control for iSCSI Access control for management interfaces including RADIUS support
Notification Methods		SNMP traps, e-mail, syslog
Power		AC voltage: 100-240 VAC ±10% single phase Frequency: 47-63 Hz Power factor: 0.98 (minimum) Power consumption: 490 VA, 530 Peak VA (operating maximum) Heat dissipation: 1,700 BTU per hour (maximum) Power supplies: Dual 440W dc
Environmental		Temperature range: 5 to 35°C / 41 to 95°F Storage temperature: -20 to 60°C / -22 to 140°F Altitude: -70 to 3,048 m operational / -305 to 12,192 m non-operational Relative humidity: 20 to 80% non-condensing operational / 5 to 95% non-condensing non-operational Shock: 5 g 10 ms ½ sine operational / 30 g 10 ms ½ sine non-operational Vibration: Random .21 grms @ 5-500Hz operational / Random 1.04 grms 2-200Hz non-operational Acoustics: Sound Power Operating: <5.8 db LpA @ 20°C Air Quality: Airborne contaminant level of G2 or lower as defined by ISA-S71.04-1985
Physical		Height: 13 cm / 5.12 in / 3 EIA units Width: 48.26 cm / 19.0 in / 1EC Rack Compliant Depth: 55.1 cm / 21.7 in Weight: 35 kg / 77.6 lb (maximum configuration)
Customer Care Services Programs		Dell EqualLogic PS5000 Customer Care Plus: 24-hour priority online/telephone access, software maintenance and updates, 4-hour onsite advance hardware replacement Dell EqualLogic PS5000 Customer Care: 24-hour priority online/telephone access, software maintenance and updates, next business day advance hardware replacement Limited Warranty*: 2 years telephone support (business hours 9AM-5PM EDT/EST USA); 1 year software maintenance and updates; 2 years hardware (return to factory, first 90 days advance replacement, pass through of drive manufacturer warranty)
Additional Services**		Dell Services can architect, deploy and optimize an IT environment for your business ensuring that the data you need is available to keep your business running and secure. Keep Your Hard Drive: Available for customers who want to retain control over sensitive data.

* For copy of Ltd Hardware Warranty, write Dell Inc., Attn: Customer Service, 300 Innovative Way, Suite 301, Nashua, NH 03062 USA or see HYPERLINK <http://www.equallogic.com/services/view.aspx>.

** Services may vary by region.



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